

REMARKS

This amendment is responsive to the Office Action mailed February 10, 2005. In the Office Action, Claims 1-26 were rejected as being anticipated or obvious in view of prior art references, including U.S. patents to Frett, Kim, Sprole, Klosterman, and Armstrong, as well as Official Notice taken by the Examiner.

As indicated above, Claim 1 has been amended to include the subject matter of Claim 2. Claim 2 has been canceled. Claim 14 has been amended to include the subject matter of Claim 18. Claim 18 has been canceled. Further, to narrow the issues for this response, Claims 5, 7 and 22-26 have been canceled without prejudice to applicants' right to seek patent protection for these claims in one or more continuation applications. Claims 3-4, 6, 8-13, 15-17, and 19-21 remain as originally presented. New Claims 27-34 are also presented for examination and allowance. Applicants have carefully considered each of the cited references and the remarks made in the Office Action, and submit that the claims presented above are in patentable condition. Reconsideration of the application and allowance of the claims at an early date is respectfully requested.

The Office Action initially objected to Claim 5 based on an informality in the text of the claim. This objection has been rendered moot by the cancellation of Claim 5.

Amended Claim 1 presents a combination of original Claims 1 and 2. In rejecting Claim 2 based on a combination of Frett and Kim, the Office Action alleges that "Kim discloses providing a feedback signal to a companion box device for processing, thereby permitting the companion box device to detect the channel state of a set top box, for the purpose of enabling the VCR to determine whether or not the cable box is responding to the appropriate commands." Office Action, page 3 (citations omitted).

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

Applicants respectfully disagree. Kim discloses a VCR capable of monitoring one or more aspects of a broadcast television signal received from a set top "cable box." The television signal is communicated to the VCR via an RF carrier frequency and contains the broadcast content being communicated to the user. According to Kim, monitoring the RF carrier of the TV signal enables the VCR to determine whether the set top box is "on" or "off" by the presence of a signal. Moreover, if "perturbations" (disturbances) in the TV signal are observed, the VCR is configured to assume that a change of channels has occurred. See Col. 5, lines 28-41 of Kim.

Within the context of the present invention, the television signal monitored by Kim does not constitute a "feedback signal" as claimed. The invention recited in Claim 1 as amended above generates a feedback signal based upon digital values obtained from the comparison stage to indicate the channel state of the set top box. This feedback signal is transmitted to a companion box for processing. The TV signal monitored by Kim cannot be considered an equivalent of the claimed feedback signal because the TV signal is not generated by a "comparison stage" from output signals of a "sensing stage" as claimed in Claim 1. While the apparatus in Frett may produce an output signal indicative of the channel state of a set top box, there is no disclosure or suggestion in either Kim or Frett to use the output signal of Frett to generate a feedback signal that is transmitted to a companion box for processing. Applicants respectfully submit that Claim 1 presents patentable subject matter and should be allowed. Claims 3 and 4 are also patentable for their dependence on allowable Claim 1.

With respect to Claim 8, applicants note that the rejection required piecing together the disclosures of four patents in a series of steps to modify and modify again a system to eventually achieve the claimed invention. Applicants respectfully submit that the four disclosures would not be combined by one of ordinary skill in the art as described in the Office Action to achieve the invention as claimed in Claim 8 without employing hindsight in view of the claim. For

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

example, Claim 8 recites a system that includes "a companion box device communicatively coupled to the light-sensing elements," wherein the companion box device includes a character recognition engine, a channel state analysis engine, and a response engine that operates on the signals received from the light sensing elements. The response engine sends a change channel command to the set top box if needed. As previously noted herein, the combined disclosures of Kim and Frett do not teach a companion box communicatively coupled with light sensing elements as claimed. The VCR in Kim monitors a TV signal from a cable box. The additional references to Klosterman and Sprole do not overcome this deficiency of Kim and Frett. As with Claim 1, Claim 8 is patentable over the prior art and should be allowed.

Claims 10-13 are also in patentable condition. For example, in Sprole, twice as many light-sensing elements are employed as the number of light emitting devices in the display. See primary phototransistors 112 and secondary phototransistors 113 discussed by Sprole and shown in Figure 1. In contrast, Claim 9 recites a set top box channel state system in which the plurality of light-sensing elements is equal in number to the plurality of light emitting devices in the display. This is not shown or suggested in the prior art. Furthermore, Claims 10-13, which depend on allowable Claim 8, are also in patentable condition and should be allowed.

Claim 14 has been amended to include the subject matter of now-canceled Claim 18. Amended Claim 14 recites "sampling output from a plurality of light-sensing elements coupled to a display of a set top box, wherein the plurality of light-sensing elements is equal in number to a plurality of light-emitting devices in the display." As discussed above with respect to Claim 9, this aspect of the invention is not taught by Sprole, nor is it taught or suggested by the other prior references cited in the Office Action. Accordingly, Claim 14 is patentable and should be allowed, along with Claims 15-17 and 19-21 for their dependence on allowable Claim 14.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

Lastly, new Claims 27-34 have been added. Applicants have carefully considered the prior art and respectfully submit that the new claims are patentable over the prior art.

CONCLUSION

In view of the foregoing amendments and remarks, applicants submit that the present application is in condition for allowance. Early action to that end is respectfully requested. Should any issues remain needing resolution prior to allowance, the Examiner is invited to contact applicants' attorney at the telephone number indicated below.

Respectfully submitted,

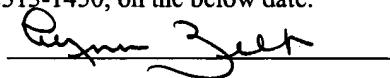
CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}



Kevan L. Morgan
Registration No. 42,015
Direct Dial No. 206.695.1712

I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the below date.

Date: July 11, 2005



KLM:ejh

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100